## ACM TRANSACTIONS ON DATABASE SYSTEMS

## Volume 15 • 1990

Editor-in-Chief Gio Wiederhold

Associate Editors D. S. Batory

Catriel Beeri Stefano Ceri

Stefano Ceri David Maier Laura Haas Gerard Salton

Theo Härder

Published by the Association for Computing Machinery Copyright © 1990, Association for Computing Machinery, Inc. 11 West 42nd Street, New York, NY 10036

## Volume 15 • 1990

308 Information for Authors. Vol. 15, No. 2 (June 1990), 308-310.

## **Contributed Papers**

**427 Agrawal, R., Dar, S.,** and **Jagadish, H. V.** Direct Transitive Closure Algorithms: Design and Performance, Vol. 15, No. 3 (Sept. 1990), 427–458.

Yahiko Kambayashi

Won Kim

- 359 Alonso, R., Barbara, D., and Garcia-Molina, H. Data Caching Issues in an Information Retrieval System. Vol. 15. No. 3 (Sept. 1990), 359–384
- 359 Barbara, D. See Alonso, R. Vol. 15, No. 3 (Sept. 1990), 359-384.
- 483 Can, F., and Ozkarahan, E. A. Concepts and Effectiveness of the Cover-Coefficient-Based Clustering Methodology for Text Databases. Vol. 15, No. 4 (Dec. 1990), 483–517.
- 162 Chakravarthy, U. S., Grant, J., and Minker, J. Logic-Based Approach to Semantic Query Optimization. Vol. 15, No. 2 (June 1990), 162–207.
- 427 Dar, S. See Agrawal, R. Vol. 15, No. 3 (Sept. 1990), 427-458.
- 281 Dasgupta, P., and Kedem, Z. M. The Five Color Concurrency Control Protocol: Non-Two-Phase Locking in General Databases. Vol. 15, No. 2 (June 1990), 281–307.
- 359 Garcia-Molina, H. See Alonso, R. Vol. 15, No. 3 (Sept. 1990), 359-384.
- 162 Grant, J. See Chakravarthy, U. S. Vol. 15, No. 2 (June 1990), 162-207.
- 96 Herlihy, M. Apologizing Versus Asking Permission: Optimistic Concurrency Control for Abstract Data Types. Vol. 15, No. 1 (Mar. 1990), 96–124.
- 558 Jagadish, H. V. A Compression Technique to Materialize Transitive Closure. Vol. 15, No. 4 (Dec. 1990), 558–598.
- 427 Jagadish, H. V. See Agrawal, R. Vol. 15, No. 3 (Sept. 1990), 427-458.
- 230 Jajodia, S., and Mutchler, D. Dynamic Voting Algorithms for Maintaining the Consistency of a Replicated Database. Vol. 15, No. 2 (June 1990), 230–280.
- 281 Kedem, Z. M. See Dasgupta, P. Vol. 15, No. 2 (June 1990), 281-307.
- 385 Kifer, M., and Lozinskii, E. L. On Compile-Time Query Optimization in Deductive Databases by Means of Static Filtering. Vol. 15, No. 3 (Sept. 1990), 385–426.
- 67 Krishnamurthy, R. See Whang, K.-Y. Vol. 15, No. 1 (Mar. 1990), 67-95.
- 40 Langerak, R. View Updates in Relational Databases with an Independent Scheme. Vol. 15, No. 1 (Mar. 1990), 40–66.
- 1 Liu, K.-C., and Sunderraman, R Indefinite and Maybe Information in Relational Databases. Vol. 15, No. 1 (Mar. 1990), 1–39.
- 625 Lomet, D. B., and Salzberg, B. The hH-Tree: A Multiattribute Indexing Method with Good Guaranteed Performance. Vol. 15, No. 4 (Dec. 1990), 625–658.
- 385 Lozinskii, E. L. See Kifer, M. Vol. 15, No. 3 (Sept. 1990), 385-426.

- 162 Minker, J. See Chakravarthy, U. S. Vol. 15, No. 2 (June 1990), 162-207.
- 311 Moore, J. C., Richmond, W. B., and Whinston, A. B. A Decision-Theoretic Approach to Information Retrieval, Vol. 15. No. 3 (Sept. 1990), 311–340.
- 230 Mutchler, D. See Jajodia, S. Vol. 15, No. 2 (June 1990), 230-280.
- 518 Nakano, R. Translation with Optimization from Relational Calculus to Relational Algebra Having Aggregate Functions. Vol. 15, No. 4 (Dec. 1990), 518–557.
- 599 Omiecinski, E., and Scheuermann, P. A Parallel Algorithm for Record Clustering. Vol. 15, No. 4 (Dec. 1990), 559–624.
- 483 Ozkarahan, E. A. See Can, F. Vol. 15, No. 4 (Dec. 1990), 483-517.
- 311 Richmond, W. B. See Moore, J. C. Vol. 15, No. 3 (Sept. 1990), 311-340.
- 625 Salzberg, B. See Lomet, D. B. Vol. 15, No. 4 (Dec. 1990), 625-658.
- 599 Scheuermann, P. See Omiecinski, E. Vol. 15, No. 4 (Dec. 1990), 599-624.
- 125 Sorenson, P. B. See Wald, D. E. Vol. 15, No. 2 (June 1990), 125–161.

  1 Sunderraman, R. See Liu, K.-C. Vol. 15, No. 1 (Mar. 1990), 1–39.
- 208 Taylor, H. M. See Whang, K.-Y. Vol. 15, No. 2 (June 1990), 208–229.
- 208 Vander-Zanden, B. T. See Whang, K.-Y. Vol. 15, No. 2 (June 1990), 208–229.
- 125 Wald, D. E. and Sorenson, P. G. Explaining Ambiguity in a Formal Query Language. Vol. 15, No. 2 (June 1990), 125–161.
- 341 Westland, J. C. Scaling Up Output Capacity and Performance Results from Information Systems Prototypes. Vol. 15, No. 3 (Sept. 1990), 341–358.
- 67 Whang, K.-Y., and Krishnamurthy, R. Query Optimization in a Memory-Resident Domain Relational Calculus Database System. Vol. 15, No. 1 (Mar. 1990), 67–95.
- 208 Whang, K.-Y., Vander-Zanden, B. T., and Taylor, H. M. A Linear-Time Probabilistic Counting Algorithm for Database Applications. Vol. 15, No. 2 (June 1990), 208–229.
- 311 Whinston, A. B. See Moore, J. C.. Vol. 15, No. 3 (Sept. 1990), 311-340.
- 459 Zhang, W., Yu, C. T., and Troy, D. Necessary and Sufficient Conditions to Linearize Doubly Recursive Programs in Logic Databases. Vol. 15, No. 3 (Sept. 1990), 459–482.

